

Amendments to the Claims

A full listing of the claims is as follows:

1. (Currently Amended) A transfective display device comprising:
a first OLED device ~~comprising a conventional OLED device~~ having a reflective electrode and characterized as emitting light of a first ~~predetermined~~ bandwidth, the first OLED device being disposed on a substrate element having a rough surface, the rough surface being on the side opposite the first OLED device;
a second OLED device ~~comprising a transparent OLED device~~ and characterized as emitting light of a second ~~predetermined~~ bandwidth that is different from the first bandwidth, the second OLED device being transparent and positioned adjacent an emitting surface of the first OLED device at the rough surface side of the substrate element for the first OLED device; and
a light modulating element positioned to modulate the light emitted by the first and second OLED devices adjacent an emitting surface of the second OLED device.
~~wherein at least one of the OLED devices is fabricated on a light scattering substrate element, the light scattering substrate element having at least a roughened surface and wherein the first and second bandwidths are different.~~
2. (Original) The device of claim 1 wherein the first and second bandwidths are emitted in combination with one another in timed sequence.
3. (Canceled)
4. (Currently Amended) The device of claim [[3]] 1 further including a third OLED device ~~comprising a transparent OLED device~~ characterized as emitting light in a third ~~predetermined~~ bandwidth, the third OLED device being transparent and positioned between the emitting surface of the first OLED device and the second OLED device, wherein the first, second and third bandwidths are emitted in combination with one another in timed sequence.
5. (Original) The device of claim 1 further including an encapsulant.

6. (Original) The device of claim 1 wherein the light modulating element is a liquid crystal display.

7. (Original) The device of claim 4, wherein the first, second and third OLEDs and the light modulating element are fabricated to form a hermetically sealed package.

8. (Currently Amended) A transfective display device comprising a light modulating element positioned adjacent to an emitting surface of an OLED backlight, said OLED backlight comprising:

a first OLED ~~fabricated~~ disposed on a light scattering substrate element, the light scattering substrate element having ~~at least one surface with a predetermined surface roughness a rough surface~~, the first OLED comprising:

a first conductive layer that is reflective disposed over the light scattering substrate element ~~element, wherein the shape of the rough surface on the substrate element is imparted to the reflective first conductive layer~~;

a first organic layer ~~disposed over the first conductive layer~~, the first organic layer comprising an emissive material that emits light in a first bandwidth;

a second conductive layer that is transmissive ~~disposed over the organic layer wherein one of the first and second conductive layers is a reflective layer and the other is a transmissive layer~~;

a second OLED positioned adjacent an emitting surface of the first OLED, the second OLED comprising:

a third conductive layer that is transmissive;

a second organic layer disposed over the third conductive layer, the second organic layer comprising an emissive material that emits light in a second bandwidth different from the first bandwidth;

a fourth conductive layer that is transmissive disposed over the second organic layer ~~wherein the third conductive layer and the fourth conductive layer comprise transmissive layers~~.

9. (Original) The device of claim 8 wherein the first and second bandwidths are emitted in combination in timed sequence.
10. (Currently Amended) The device of claim 8 further comprising a third OLED positioned adjacent an emitting surface of the second OLED, the third OLED comprising:
 - a fifth conductive layer that is transmissive;
 - a third organic layer disposed over the fifth conductive layer,
 - the third organic layer comprising an emissive material that emits light in a third bandwidth different from the first and the second bandwidths; and,
 - a sixth conductive layer that is transmissive disposed over the third organic layer~~wherein the fifth conductive layer and the sixth conductive layer comprise transmissive layers.~~
11. (Original) The device of claim 10 wherein the first, second and third bandwidths are emitted in combination in timed sequence
12. (Original) The device of claim 11 wherein the first, second and third bandwidths are red, green and blue respectively.
13. (Original) The device of claim 8 wherein the light modulating element and the OLED backlight are fabricated to form a hermetically sealed package.
14. (Original) The device of claim 8 wherein at least one of the transmissive conductive layers comprises indium tin oxide (ITO).
15. (Original) The device of claim 14 wherein the at least one of the transmissive conductive layers comprises a magnesium (Mg) material and a lithium silver (Li-Ag) material.
16. (Currently Amended) The device of claim 8 wherein the reflective first conductive layer comprises an opaque metal electrode layer.

17. (Currently Amended) The device of claim 8 wherein the predetermined surface roughness is characterized as S, Sm: $3\lambda - 200\lambda$ and Δ : 4~30.

18. (Currently Amended) The device of claim 8 wherein the first OLED is deposited on the surface of the light scattering substrate element that has the rough predetermined surface roughness.

19 – 34. (Canceled)

35. (Currently Amended) A transfective display device comprising a light modulating element and an OLED backlight, said OLED backlight comprising [[a]]:

a substrate having ~~an upper surface and a lower surface, at least one of the upper surface and the lower surface having a predetermined surface roughness; a rough surface;~~

a first electrode comprising a reflective material disposed over the substrate at the side of the rough surface, wherein the shape of the rough surface on the substrate is imparted to the first electrode;

a second electrode disposed over the first electrode, the second electrode comprising a transmissive material;

a first organic layer including an emissive material disposed between the first electrode and the second electrode;

a third electrode disposed over the second electrode, the third electrode comprising a transmissive material;

a second organic layer including an emissive material disposed between the second electrode and the third electrode;

wherein the first electrode is the only significantly reflective layer in the device.

36. (Original) The device of claim 35, wherein the first organic layer comprises a first emissive material capable of emitting a first spectra of light; and the second organic layer comprises a second emissive material capable of emitting a second spectra of light different from the first.

37. (Currently Amended) The transfective device of claim 36 further including:
a fourth electrode disposed over the third electrode, the fourth electrode comprising a transmissive material; and
a third organic layer including a third emissive material disposed between the third electrode and the fourth electrode;
wherein the third emissive material is capable of emitting a third spectra of light different from the first and the second spectra of light.
38. (Currently Amended) The transfective device of claim 37, wherein the first emissive material is included in a first organic light emitting diode, the second emissive material is included in a second organic light emitting diode, and the third emissive material is included in a third organic light emitting diode; wherein said first, second and third organic light emitting diodes comprise separate OLED devices.
39. (Original) The transfective device of claim 37, wherein the first, second and third emissive materials are included in a single OLED device.
40. (Original) The transfective device of claim 39, wherein the single OLED device comprises a stacked light emitting diode.
41. (Original) The transfective device of claim 35 wherein the OLED backlight is encapsulated.
42. (Original) The transfective device of claim 38 wherein the OLED backlight is encapsulated.
43. (Original) The transfective device of claim 35 wherein the OLED backlight and the light modulating element are fabricated to form a hermetically sealed device.
44. (New) The display device of claim 8, wherein the light modulating element is a liquid crystal display.

45. (New) The display device of claim 8, wherein the distance between the reflective first conductive layer and the light modulating element is less than about 2000 microns.
46. (New) The display device of claim 8, wherein the distance between the reflective first conductive layer and the light modulating element is less than about 5000 microns.
47. (New) The display device of claim 8, wherein the mean profile element width of the surface roughness on the substrate element is in the range of $3\lambda - 200\lambda$.
48. (New) The display device of claim 8, wherein the rough surface of the substrate element has a regular pattern.
49. (New) The display device of claim 8, wherein the rough surface of the substrate element has a random pattern.
50. (New) The display device of claim 8, wherein the reflective first conductive layer is disposed on and in physical contact with the light scattering substrate element.
51. (New) The display device of claim 8, wherein the first organic layer is disposed between the substrate element and the reflective first conductive layer.
52. (New) The display device of claim 35, wherein the mean profile element width of the surface roughness on the substrate is in the range of $3\lambda - 200\lambda$.
53. (New) The display device of claim 35, wherein the first electrode is disposed on and in physical contact with the substrate.
54. (New) The display device of claim 35, wherein the first electrode is disposed over the second electrode.